

- 90* 27. (New) A dehydroxylated mesoporous silica film as recited in claim *25*, wherein said gas-phase species and said physisorbed species are removed from said porous film by applying a vacuum on said porous film. *88*
- 91* 28. (New) A dehydroxylated mesoporous silica film as recited in claim *24*, wherein said gas-phase species and said physisorbed species are removed from said porous film by applying a flowing forming gas or inert gas. *87*
- 92* 29. (New) A dehydroxylated mesoporous silica film as recited in claim *25*, wherein said gas-phase species and said physisorbed species are removed from said porous film by applying a flowing forming gas or inert gas. *88*
- 93* 30. (New) A dehydroxylated mesoporous silica film as recited in claim *24*, wherein said surfactant containing silica precursor solution comprises alkyl-substituted silica precursors. *87*
- 94* 31. (New) A dehydroxylated mesoporous silica film as recited in claim *25*, wherein said surfactant containing silica precursor solution comprises alkyl-substituted silica precursors. *88*
- 95* 32. (New) A dehydroxylated mesoporous silica film as recited in claim *26*, wherein the surfactant containing silica precursor solution comprises alkyl-substituted silica precursors. *89*
- 96* 33. (New) A dehydroxylated mesoporous silica film as recited in claim *27*, wherein the surfactant containing silica precursor solution comprises alkyl-substituted silica precursors. *90*
- 97* 34. (New) A dehydroxylated mesoporous silica film as recited in claim *28*, wherein the surfactant containing silica precursor solution comprises alkyl-substituted silica precursors. *91*
- 98* 35. (New) A dehydroxylated mesoporous silica film as recited in claim *29*, wherein the surfactant containing silica precursor solution comprises alkyl-substituted silica precursors. *92*